Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-6. (Canceled)

7. (Currently amended) A method to determine the survival outcome of ~~an ER+~~ a breast cancer afflicted subject ~~if treated with tamoxifen~~, said method comprising assaying a sample of [[ER+]] breast cancer cells from said subject for the ratio of HoxB13 and IL17BR expression levels ~~level(s) of one or more genes in Table 1, 2, 4, and/or 5~~.

8. (Currently amended) The method of claim 7 wherein said assaying comprises determination of the expression levels of ~~one or more genes is 11 or more genes~~ HoxB13 and IL17BR.

9. (Original) The method of claim 7 wherein said subject is human.

10. (Currently amended) The method of claim 7 wherein said assaying for the expression levels of ~~one or more genes~~ HoxB13 and IL17BR comprises detection of nucleic acids derived from [[said]] a sample of [[ER+]] breast cancer cells from an ER+ subject.

11. (Original) The method of claim 10 wherein said nucleic acids derived from said sample are prepared by mRNA amplification or quantitative PCR.

12. (Currently amended) The method of claim 7 wherein said assaying for the expression level of ~~one or more genes~~ HoxB13 and IL17BR comprises detection of HoxB13 and IL17BR proteins ~~encoded by said genes~~.

13. (Original) The method of claim 12 wherein said detection of proteins comprises detection with antibodies which bind said proteins.

14. (Original) A method of determining prognosis of a subject having ER+ breast cancer if treated with tamoxifen, or of a subject afflicted with ER+ breast cancer and treated with tamoxifen, said method comprising:

assaying ~~for the expression level(s) of one or more genes in Table 1, 2, 4, and/or 5 from~~ a breast cancer cell sample from said subject for the ratio of HoxB13 and IL17BR expression levels.

15. (Currently amended) The method of claim 14 wherein said assaying comprises determination of the expression levels of ~~one or more genes is 11 or more genes~~ HoxB13 and IL17BR.

16. (Original) The method of claim 14 wherein said subject is human.

17. (Currently amended) The method of claim 14 wherein said assaying for the expression levels of ~~one or more genes~~ HoxB13 and IL17BR comprises detection of nucleic acids derived from said sample of ER+ breast cancer cells or detection of HoxB13 and IL17BR proteins ~~encoded by said genes~~.

18. (Original) The method of claim 17 wherein said nucleic acids derived from said sample are prepared by mRNA amplification or quantitative PCR.

19. (Original) The method of claim 17 wherein said detection of proteins comprises detection with antibodies which bind said proteins.

20. (Original) The method of claim 14 wherein said assaying comprises using an array.

21. (Original) The method of claim 14 wherein said sample is a ductal lavage or fine needle aspiration sample.

22. (Original) The method of claim 14 wherein said sample is a section of tissue from a subject or are cells microdissected from said section.

23. (Currently amended) A method to determine therapeutic treatment for an ER+ breast cancer patient based upon said patient's expected response to tamoxifen treatment, said method comprising

determining an expected response to tamoxifen treatment for said patient by assaying a sample of breast cancer cells from said patient for the ~~expression level(s) of one or more one genes in Table 1, 2, 4, and/or 5~~ ratio of HoxB13 and IL17BR expression levels; and

selecting the appropriate treatment for ~~a patient with such a survival outcome~~ said patient.

24. (Currently amended) The method of claim 23 wherein said assaying comprises determination of the expression levels of ~~one or more genes is 11 or more genes~~ HoxB13 and IL17BR.

25. (Original) The method of claim 23 wherein said subject is human.

26. (Original) The method of claim 23 wherein said assaying comprises detection of nucleic acids derived from said sample of ER+ breast cancer cells or detection of proteins encoded by said genes.

27. (Original) The method of claim 26 wherein said nucleic acids derived from said sample are prepared by mRNA amplification or quantitative PCR.

28. (Original) The method of claim 26 wherein said detection of proteins comprises detection with antibodies which bind said proteins.

29. (Original) The method of claim 23 wherein said assaying comprises using an array.

30. (Original) The method of claim 23 wherein said sample is a ductal lavage or fine needle aspiration sample.

31. (Original) The method of claim 23 wherein said sample is a section of tissue from a subject or are cells microdissected from said section.

32. (Currently amended) A method to determine the survival outcome of a human subject having [[ER+]] breast cancer ~~if treated with tamoxifen~~, said method ~~further~~ comprising assaying a sample of breast cells from said subject for increased expression of ~~one or more human IL17RB or CACNA1D sequences~~ IL17BR or decreased expression of HoxB13.

33. (Original) The method of claim 32 wherein said sample is obtained by solid tissue biopsy or a non-invasive procedure, such as ductal lavage, fine needle aspiration, or a needle biopsy.

34. (Original) The method of claim 33 wherein microdissection is used to isolate breast cells from said sample before assaying for nucleic acid expression.

35. (Currently amended) The method of claim 32 wherein said assaying is by hybridization to a polynucleotide comprising sequences of at least 24 nucleotides from the 3' untranslated region, the coding region, or the 5' untranslated region, of human HoxB13 or IL17RB ~~or CACNA1D~~.

36. (Original) The method of claim 32 wherein said assaying comprises mRNA amplification or PCR amplification, such as quantitative PCR, of said sequences.

37. (Original) The method of claim 32 wherein said assaying for increased expression comprises detection of polypeptides encoded by said sequences.

38. (Original) The method of claim 37 wherein said detection of polypeptides comprises detection with antibodies which bind said polypeptides.

39. (Currently amended) A method to determine the survival outcome of a human subject having ER+ breast cancer if treated with tamoxifen, said method comprising

assaying a sample of breast cells from said subject for decreased expression of human HOXB13 sequences or increased expression of IL17BR .

40. (Original) The method of claim 39 wherein said sample is obtained by solid tissue biopsy or a non-invasive procedure, such as ductal lavage, fine needle aspiration, or a needle biopsy.

41. (Original) The method of claim 40 wherein microdissection is used to isolate breast cells from said sample before assaying for nucleic acid expression.

42. (Currently amended) The method of claim 39 wherein said assaying is by hybridization to a polynucleotide comprising sequences of at least 24 nucleotides from the 3' untranslated region, the coding region, or the 5' untranslated region, of human HOXB13 or IL17BR.

43. (Original) The method of claim 39 wherein said assaying comprises mRNA amplification or PCR amplification, such as quantitative PCR, of said sequences.

44. (Original) The method of claim 39 wherein said assaying is for inactivation or methylation of HOXB13 sequences.

45. (Currently amended) The method of claim 39 wherein said assaying comprises detection of increased HoxB13 mRNA degradation.

46. (Currently amended) The method of claim 39 wherein said assaying for ~~increased~~ decreased HoxB13 expression comprises detection of polypeptides encoded by said sequences.

47. (Original) The method of claim 46 wherein said detection of polypeptides comprises detection with antibodies which bind said polypeptides.

48-53. (Canceled)

54. (Currently amended) ~~A method to determine the survival outcome of a human subject having ER+ breast cancer if treated with tamoxifen, said~~ The method ~~comprising~~ of claim 7, wherein said assaying ~~a sample of breast cells from said subject~~ for ~~increased~~ expression of an IL17RB sequence is of a sequence selected from SEQ ID NOS: 1, 2, 3, or ~~8, 9, or 11-17~~.

55. (Currently amended) ~~A method to determine the survival outcome of a human subject having ER+ breast cancer if treated with tamoxifen, said~~ The method ~~comprising~~ of claim 32, wherein said assaying ~~a sample of breast cells from said subject~~ for ~~decreased~~ expression of a HoxB13 sequence is of a sequence selected from SEQ ID NOS: 6, 7, 10 or 11-31 [[18-31]].

56. (New) The method of claim 7 wherein said survival outcome is breast cancer recurrence.

57. (New) The method of claim 7 wherein said subject was treated with tamoxifen.

58. (New) The method of claim 7, wherein said assaying for expression of a HoxB13 sequence is of a sequence selected from SEQ ID NOS: 6, 7, 10 or 11-31.

59. (New) The method of claim 14, wherein said assaying for expression of a HoxB13 sequence is of a sequence selected from SEQ ID NOS: 6, 7, 10 or 11-31.

60. (New) The method of claim 14, wherein said assaying for expression of an IL17RB sequence is of a sequence selected from SEQ ID NOS: 1, 2, 3, or 8.

61. (New) The method of claim 23, wherein said assaying for expression of a HoxB13 sequence is of a sequence selected from SEQ ID NOS: 6, 7, 10 or 11-31.

62. (New) The method of claim 23, wherein said assaying for expression of an IL17RB sequence is of a sequence selected from SEQ ID NOS: 1, 2, 3, or 8.

63. (New) The method of claim 32 wherein said survival outcome is breast cancer recurrence.

64. (New) The method of claim 32 wherein said subject was treated with tamoxifen.

65. (New) The method of claim 32, wherein said assaying for expression of an IL17RB sequence is of a sequence selected from SEQ ID NOS: 1, 2, 3, or 8.

66. (New) The method of claim 39, wherein said assaying for expression of a HoxB13 sequence is of a sequence selected from SEQ ID NOS: 6, 7, 10 or 11-31.

67. (New) The method of claim 39, wherein said assaying for expression of an IL17RB sequence is of a sequence selected from SEQ ID NOS: 1, 2, 3, or 8.